

In the Claims

1. – 26. (Cancelled)

27. (Currently amended) A method of producing a construct comprising a recombinant virus-like particle and at least one first and second exogenous protein for expression in ~~[[the]]~~ a host organism ~~and the exogenous proteins target specific tissue in a target animal~~, the method comprising:

- (a) providing a viral genome that infects the host organism wherein the host organism is yeast, bacteria, algae, fish or crustacean;
- (b) isolating at least one viral coat protein sequence from the viral genome that encodes for a capsid structure;
- (c) inserting into the viral coat protein sequences at least one first exogenous sequence encoding a protein or peptide of interest ~~into the coat protein sequences~~, wherein the protein or peptide is antigenic or allergenic in the target animal;
- (d) inserting into the viral coat protein sequences at least one second exogenous sequence encoding a tissue-targeting protein ~~sequence in the animal into the coat protein sequences~~, wherein the ~~expressed~~ tissue-targeting protein has binding affinity for a receptor on a stomach or intestinal cell wall tissue of the target animal;
- (e) cloning the viral coat protein sequences comprising the first and second exogenous sequences into an appropriate vector for transforming ~~infection~~ of the host organism; and
- (f) transforming the host organism for expression of the recombinant virus-like particle and exogenous peptides or proteins therein, wherein the host organism is not the ~~and~~ target animal ~~are not the same~~.

28. – 29. (Cancelled)

30. (Currently amended) The method of claim 27, wherein two ~~more than one~~ first exogenous sequence is inserted.

31. (Currently amended) The method of claim 27, wherein one or more of the second exogenous sequences has the function of targeting the expressed recombinant virus-like particle to a specific location on intestinal cell wall of the target animal.

32. (Currently amended) The method of claim 27, wherein more than one viral coat protein sequence is isolated.

33. (Cancelled)

34. (Previously presented) A genetic construct for expression in a host organism with subsequent administration of the host organism with expressed proteins to a target animal, the construct comprising at least one nucleotide sequence encoding at least one viral coat protein for expression in the host organism wherein the host organism is selected from the group consisting of yeast, bacteria, algae, fish or crustacean and a first and second exogenous sequence, wherein the first exogenous sequence encodes for an antigenic or allergenic protein effective in the target animal and the second exogenous sequence encodes for a tissue-targeting protein that has binding affinity for a receptor on a stomach or intestinal cell wall of the target animal; wherein both the antigenic ~~antigenic~~ or allergenic ~~allergenic~~ protein and tissue-targeting protein, when expressed in the host organism, are displayed ~~positioned~~ on the surface of the expressed viral coat protein, ~~wherein the expressed tissue-targeting protein has the function of targeting the expressed antigenic or allergenic protein to a specific location on tissue in the target animal after the host organism with the expressed proteins is administered to the target and wherein the host organism is not the and target animal are not the same.~~

35. (Currently amended) The construct of claim 34, wherein more than one viral coat protein has been modified to display ~~foreign~~ exogenous proteins ~~or peptides~~.

36.-41 (Cancelled)

42. (Withdrawn and currently amended) A method of delivery of the expressed proteins of claim 34, wherein the host organism and whole biomass of cultured host organism is orally fed to the target animal ~~which is a human or non-human animals.~~

43. (Withdrawn) The method of claim 42, wherein the biomass is processed for uniform dosing.

44. (Withdrawn) The method of claims 42-43, wherein the biomass is freeze dried.

45. (Withdrawn) The method of claims 42-43, wherein the biomass is encapsulated.

46. (Withdrawn and currently amended) The method of claims 42-45, wherein the ~~vaccine~~ cultured host organism is used as a treatment for allergy.

47. -48.